

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney/Agent **Mr. Charles W. Stewart** on **March 27, 2009**.

The application has been amended as follows:

**In the Claim**

**Claims 1-7, 13-21, & 24-26 have been canceled.**

**Claim 22 has been amended as follow.**

--22. (Currently Amended) A hydroprocessing method, comprising:  
contacting under hydroprocessing conditions a hydrocarbon feed with a catalyst comprising a composition of the general formula, on an oxide basis,



wherein

X represents at least one non-noble Group VIII metal;

M represents at least one ~~non-noble~~ Group VIb metal;

Z represents one or more elements selected from ~~aluminium~~ aluminum, silicon, magnesium, titanium, zirconium, boron and zinc;

O represents oxygen;

one of b and c is the integer 1;

and

d, e, and the other of b and c each are a number greater than 0 such that the molar ratio of b:c is in the range of from 0.5:1 to 5:1, the molar ratio of d:c is in the range of from 0.2:1 to 50:1, and

the molar ratio of c:c is in the range of from 3.7:1 to 108:1; which is prepared by a precipitation process, wherein a refractory oxide material in an amount in the range of from 15 to 40 wt%, on an oxide basis, is precipitated with at least one non-noble Group VIII compound and at least one Group VIb metal compound; and wherein said composition has an XRD diffraction pattern in which above  $2\theta=15^\circ$ , there is a local maximum having a characteristic full width at a half maximum above  $2.5^\circ$  at each of a  $2\theta$  value in the range of from  $25.5^\circ$  to  $28.0^\circ$ ; a  $2\theta$  value in the range of from  $33.6^\circ$  to  $34.6^\circ$ ; and a  $2\theta$  value in the range of from  $59.8^\circ$  to  $62.2^\circ$ , and there is no reflection or local maximum having a characteristic full width at half maximum of  $2.5^\circ$  or below.—

**The following claims have been added.**

--47. (New) A hydroprocessing method as recited in claim 23 wherein the metals X and M are one of nickel and molybdenum, nickel and tungsten, and nickel, molybdenum and tungsten.

48. (New) A hydroprocessing method as recited in claim 47, wherein said catalyst has an XRD diffraction pattern in which above  $2\theta=15^\circ$ , there is a local maximum having a characteristic full width at a half maximum above  $2.5^\circ$  at each of a  $2\theta$  value in the range of from  $25.5^\circ$  to  $28.0^\circ$ ; a  $2\theta$  value in the range of from  $33.6^\circ$  to  $34.6^\circ$ ; and a  $2\theta$  value in the range of from  $59.8^\circ$  to  $62.2^\circ$ , and there is no reflection or local maximum having a characteristic full width at half maximum of  $2.5^\circ$  or below.

49. (New) A hydroprocessing method as recited in claim 48, wherein X is nickel, M is molybdenum, Z is silicon; the molar ratio of X:M is in the range of from 1:1 to 2:1 and the refractory oxide material is precipitated with the metals compounds in an amount in the range of from 15 to 30 wt%.--

**Applicants' (Attorney's) Remarks**

**REMARKS**

The Examiner has indicated that the pending claims 8-12 and 27-46 are allowable and requests cancellation of the non-elected, withdrawn claims 1-7 and 13-26.

The Examiner indicates that the hydroprocessing use claims would be rejoined if amended so that the recited composition corresponds in scope to the allowed composition claims. Therefore, an amendment of the withdrawn method claim 22 is proposed so as to define the catalyst to have the same scope as the catalyst of claim 8. It is requested that withdrawn claim 22, as amended, and dependent claim 23 be rejoined and new dependent claims 47-49, claiming a hydroprocessing method using the catalysts having the limitations as expressed in claims 9, 11 and 12, be added.

Respectfully submitted,  
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**Status of Withdrawn Claims**

2. Claims 22-23 were previously withdrawn. They have now been rejoined with the elected claims because the elected product claims are now found allowable. The allowable subject matter of the product claims have also been incorporated into these process claims.

**Conclusion**

3. Claims 1-46 were pending. Claims 1-7, 13-21, & 24-26 have now been canceled. Claims 47-49 have been added. Claims 8-12, 22-23, & 27-49 are now pending and allowed.

**Contacts**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner CAM N. NGUYEN, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Primary Examiner

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/C. N. N./

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